

REMARKS

This Amendment and Response is filed in reply to the Office action dated February 8, 2007. Claims 1-4, 6, 8-10 and 17-19 are amended and claims 7 and 11-15 are canceled. Accordingly, after entry of this Amendment and Response, claims 1-6, 8-10 and 16-20 remain pending.

I. Claim Rejections Under 35 U.S.C. § 112

Claims 1-5, 7 and 17 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the Office action alleges that it is unclear in claim 1 how propagating the data signal models a near domino function if by definition a near domino function propagates the data signal and that it is unclear how in claim 17 the means for modeling the output of the combinatorial gate as a data signal includes means for modeling a near domino function if the two are equivalent by definition. The other claims were rejected by virtue of their dependency. In response, claims 1 and 17 have been amended and claim 7 has been canceled. Claim 1 has been amended to specify that the data signal is propagated as an output signal of the combinatorial gate when the output of the combinatorial gate feeds into a data input of a dynamic circuit. Claim 17 has been amended to specify means for modeling a near domino gate rather than near domino function. It is respectfully submitted that claims 1-5 and 17 are in compliance with 35 U.S.C. § 112 and such indication is respectfully requested.

II. Claim Rejections Under 35 U.S.C. § 101

Claims 1-20 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter. Specifically, the Office action asserts that the current state of the claim language is such that a reasonable interpretation of the claims would not result in any useful, concrete or tangible product. In response, independent claims 1 and 6 have been amended to produce tangible results. Specifically, claim 1 has been amended to provide a static timing model of the combinatorial gate, a tangible result. Claim 6 has been amended to classify the combinatorial gate as a clock gate or a near domino gate, a tangible result. It is respectfully submitted that claim 16 is statutory because it is directed to a structure, a static timing engine. Therefore, it is respectfully submitted that claims 1-20 are in compliance with 35 U.S.C. § 101 and such indication is respectfully requested.

III. Claim Rejections Under 35 U.S.C. § 102

Claims 1-20 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,867,036 to Rajsuman (hereinafter "Rajsuman"). An anticipation rejection requires that each and every claim limitation be disclosed in a single prior art reference.

Initially, the rejection of independent claims 1, 6 and 16 is addressed. Independent claim 1 has been amended to include the limitations of "determining that a data signal has been propagated to a first input of the combinatorial gate," "determining that a clock signal has been propagated to a second input of the combinatorial gate," and "providing a static timing model of the combinatorial gate." Claim 6 has been amended to include the limitations "classifying the combinatorial gate as a clock gate when the output of the combinatorial gate is tied to a clock input of a sequential circuit" and "classifying the combinatorial gate as a near domino gate when the output of the combinatorial gate is tied to a data input of a dynamic circuit." Finally, claim 16 includes the limitation of performing a reverse traversal function on a circuit containing the combinatorial gate."

It is respectfully submitted that Rajsuman does not teach any of these limitations. Rajsuman is concerned with how to test dynamic circuits (see *Rajsuman*, column 3, lines 9-40). That is, Rajsuman teaches use of scan chains to clock test vectors into a domino circuit. The vectors are applied as inputs during the evaluation phase and the results (outputs) are checked to detect faults (see *Rajsuman*, column 7, lines 11-23). Rajsuman, however, does not determine whether a "data signal has been propagated to a first input of a combinatorial gate" and does not determine whether a "clock signal has been propagated to a second input of the combinatorial gate" as required by claim 1. Rajsuman instead controls the input signals so there is no need for any determinations. Further, Rajsuman does not classify the combinatorial gate as a clock gate or a near domino gate as required by claim 6. Rajsuman only drives domino logic blocks with a clock signal and uses a register to hold input test data constant during test mode (see *Rajsuman*, column 6, lines 32-38) to detect faults within the domino logic. Finally, Rajsuman does not perform a reverse traversal function of a circuit containing the combinatorial gate as required by claim 16.

Insofar as Rajsuman does not disclose all the limitations of independent claims 1, 6 and 16, it cannot anticipate them. Therefore, it is respectfully submitted that independent claims 1, 6 and 16 are patentable over Rajsuman, believed to be in form for allowance, and such indication is respectfully requested. The remaining claims 2-5, 8-10 and 17-20 all depend, either directly or indirectly, from one of independent claims 1, 6 and 16. Accordingly, these dependent claims are themselves patentable over Rajsuman for at least the reasons set forth above and such indication is respectfully requested. This statement is made without reference to or waiving the independent bases of patentability within each dependent claim.

IV. Conclusion

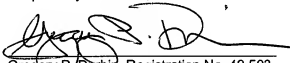
The Applicant thanks the Examiner for his thorough review of the application. The Applicant respectfully submits the present application, as amended, is in condition for allowance and respectfully requests the issuance of a Notice of Allowability as soon as practicable.

This Amendment is submitted contemporaneously with a petition for a two-month extension of time in accordance with 37 C.F.R. § 1.136(a). Accordingly, please charge Deposit Account No. 04-1415 in the amount of \$450.00, for a two-month extension of time fee. The Applicant believes no further fees or petitions are required. However, if any such petitions or fees are necessary, please consider this a request therefor and authorization to charge Deposit Account No. 04-1415 accordingly.

If the Examiner should require any additional information or amendment, please contact the undersigned attorney.

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Respectfully submitted,



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